

WHAT IS CLAIMED IS:

- 1 1. An apparatus for converting video bitstream data coded using a first
2 hybrid video codec to second bitstream data coded using a second hybrid video codec
3 comprising;
4 a. a data retrieval module disposed in a datapath ahead of a data terminal
5 and operative to retrieve the video bitstream data from all data received at a gateway;
6 b. a bitstream syntax decoder coupled to the data retrieval module
7 operative to detect errors in the video bitstream; and
8 c. a fast update unit operative to send a video-fast-update message when
9 either said data retrieval module or said bitstream syntax decoder module detects an error in
10 the video bitstream data.
- 1 2. The apparatus of claim 1 wherein the video-fast-update message
2 further includes updates at a block level.
- 1 3. The apparatus of claim 1 wherein standards for the video bitstream
2 match the second bitstream.
- 1 4. An apparatus for converting video bitstream data coded using hybrid
2 video codec to second bitstream data coded using a second hybrid video codec comprising;
3 a. a video bitstream decoder disposed in a data path ahead of a data
4 terminal and operative to decode the video bitstream data; and
5 b. means coupled to said decoder for re-encoding frames as I-frames
6 upon receipt of a video-fast-update request.
- 1 5. The apparatus of claim 4 wherein individual GOBs and macroblocks
2 are re-encoded using intra macroblocks upon receipt of a video-fast-update request.
- 1 6. The apparatus of claim 4 wherein standards for the video bitstream
2 match the second bitstream.
- 1 7. The apparatus of claim 4 wherein the video bitstream decoder is a
2 tandem transcoder operative to fully decode each frame before encoding each frame.
- 1 8. The apparatus of claim 4 wherein the video bitstream decoder only re-
2 encodes selected macroblocks.

1 9. The apparatus of claim 4 wherein the video bitstream decoder is
2 operative to manipulate data in the Discrete Cosine Transform domain.

1 10. A method for converting video bitstream data coded using a first
2 hybrid video codec to second bitstream data coded using a second hybrid video codec
3 comprising;

4 a. retrieving the video bitstream data from all data received at a gateway
5 a data retrieval module disposed in a datapath ahead of a data terminal;

6 b. detecting errors in the video bitstream at a bitstream syntax decoder
7 coupled to the data retrieval module; and

8 c. sending a video-fast-update message when said data retrieval module
9 or said bitstream syntax decoder module detects an error in the video bitstream data.

1 11. A method for converting video bitstream data coded using hybrid
2 video codec to second bitstream data coded using a second hybrid video codec comprising;

3 a. decoding video bitstream data in a video bitstream decoder disposed in
4 a data path ahead of a data terminal ahead of a terminal; and

5 b. re-encoding frames as I-frames upon receipt of a video-fast-update
6 request.

1 12. The method of claim 11 wherein individual GOBs and macroblocks
2 are re-encoded using intra macroblocks upon receipt of a video-fast-update request.

1 13. The method of claim 11 wherein standards for the video bitstream
2 match the second bitstream.

1 14. The method of claim 11 wherein the video bitstream decoder is a
2 tandem transcoder operative to fully decode each frame before encoding each frame.

1 15. The method of claim 11 wherein the video bitstream decoder only re-
2 encodes selected macroblocks.

1 16. The method of claim 11 wherein the video bitstream decoder is
2 operative to manipulate data in the Discrete Cosine Transform domain.

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